# LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



## OFFICE OF FISHERIES INLAND FISHERIES SECTION

PART VI -A

WATERBODY MANAGEMENT PLAN SERIES

## RACCOURCI OLD RIVER

**HISTORY & MANAGEMENT ISSUES** 

## **CHRONOLOGY**

August 2013 - Prepared by Rachel Walley, Biologist Manager, District 7

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#### LAKE HISTORY

#### **GENERAL INFORMATION**

#### Formation

Raccourci Old River was historically the main channel of the Mississippi River. In 1848 it was separated as a State of Louisiana Project directed by Captain Shreve. Currently it is an active oxbow that maintains a hydraulic connection to the main river. The lake receives inflow from the river from the northeastern end of the lake via connection termed "The Narrows".

#### Size

4,900 surface acres at pool

#### Pool stage

26' MSL (mean sea level) coincides with low water levels of the Mississippi River. The lake typically exceeds levels of 40' MSL during high water levels.

#### Watershed

Raccourci Old River receives inflow from Mississippi River when the river is at or above 17'MSL in Baton Rouge. The rest of the watershed consists of Raccourci Island, the area of land that is contained between the lake and the river.

#### Parishes located

Pointe Coupee and West Feliciana Parishes (SEE <u>APPENDIX I</u> – LOCATION MAP).

#### Border waters

Raccourci Old River is contained within the Mississippi River levees

#### Drawdown description

None

#### LAKE AUTHORITY

#### Association

The Lake and Watershed Committee of the Pointe Coupee Parish Police Jury is no longer active.

#### **ACCESS**

#### Boat docks

4 boat ramps < <a href="http://lamarinas.losco.lsu.edu/">http://lamarinas.losco.lsu.edu/</a> >

Table 1. Boat launching facilities for Raccourci Old River, LA.

Name	Coordinates	
Big Daddy's	30.83752	-91.61837
Public Launch	30.83457	-91.55518
Raccourci Landing	30.84418	-91.65243
Normandy Landing	30.83821	-91.63744

(SEE **APPENDIX II** – MAP AND LANDINGS)

#### Reefs

An unknown number of artificial reef structures have been placed by individual fisherman. These include sunken Christmas trees, willow trees, tires and riprap. Most are unmarked.

#### SHORELINE DEVELOPMENT

#### State/National Parks

NONE

#### Shoreline development by landowners

The island was once inhabited with homesteads prior to the levee system in 1927. Since then parts of the land has been farmed and leased by logging companies. Currently, less than 5% of the shoreline is developed.

#### PHYSICAL DESCRIPTION OF WATER BODY

#### Shoreline length

Approximately 31 miles at pool.

#### <u>Timber type</u>

Bottomland hardwoods occur on the island, the eastern side, and the extreme southern end of the lake. Most of the mature trees have been logged with the remaining large trees scattered and denser in the lower swamp areas.

#### Average depth

25 feet (at pool)

#### Maximum depth

75 feet (at pool)

#### Natural seasonal water fluctuation

Water levels are dependent on Mississippi River stages. A rock weir that was constructed in the Narrows stops water from flowing over when the river stage at Baton Rouge is 15'MSL or less. When the Mississippi River reaches 17'MSL at Baton Rouge, the connection between the lake and the river is navigable.

#### **EVENTS / PROBLEMS**

1829 – Construction of the Potato Levee. The low Potato Ridge levee separates the fore bay from Raccourci Old River.

1848 – Separated from the main river to better navigation.

1940 – Morganza Spillway completed. Its purpose is to divert water from the Mississippi River to the Atchafalaya River Basin during major flood events. Mississippi River water flows through Raccourci Island and Old River to the fore bay area before flowing through the spillway (SEE <u>APPENDIX III</u> – SPILLWAY MAP). The height of Potato Levee is also increased to present height to further help divert water.

1962 – Pointe Coupee Parish Police Jury proposes the constructions of a dam to disconnect the lake from the Mississippi River. Louisiana Wild Life and Fisheries Commission opposed the dam's constructions (**SEE APPENDIX IV** – LETTER OF OPPOSITION)

1973- Morganza Spillway was opened.

2011 - Morganza Spillway was opened.

#### **MANAGEMENT ISSUES**

#### **AQUATIC VEGETATION**

Due to large seasonal water fluctuations, nuisance aquatic vegetation does not occur. There are no records of treatment or complaint of vegetation.

#### HISTORY OF REGULATIONS

**Standardized Regulations** 

Statewide regulations are in effect. <a href="http://www.wlf.louisiana.gov/fishing/regulations">http://www.wlf.louisiana.gov/fishing/regulations</a>

#### FISH KILLS / DISEASE HISTORY

There are no records of fish kills or disease. However, there have been reports of Asian carp specific fish kills during warm summer months. In September of 2010, hundreds of dead silver carp were observed scattered around the entire lake. Fish appeared to have been dead for some time. Personal communication with local fishermen revealed that the fish kill had

been ongoing for several weeks and consisted of thousands of fish. No other species were identified and no formal report was made.

#### **CONTAMINANTS / POLLUTION**

#### Water quality

The 2010 Water Quality Integrated Report from the Louisiana Department of Environmental Quality, Water Permits Division listed Old River having the presence of a non-native aquatic plant (water hyacinth – *Eichhornia crassipes*) as the lake's only impairment.

#### Fish consumption advisory

NONE

#### **BIOLOGICAL**

#### Fish sampling

To monitor the sport fishery of Raccourci Old River, LDWF initiated standardized sampling in 1965 (Table 1).

Table 1. Sampling efforts on Raccourci Old River, LA from 1965 – 2011.

RACCOURCI OLD RIVER SAMPLING				
1965	Rotenone – 3 stations			
1972	Rotenone – 3 stations			
1983	Rotenone – 3 stations			
2007	Electrofishing – 6 stations			
2009	Electrofishing – 6 stations			
2010	Electrofishing – 6 stations Lead nets – 6 stations			
2011	Electrofishing – 6 stations Gill nets – 6 stations Lead nets – 6 stations			
2012	Electrofishing – 6 stations Lead nets – 6 stations			
2013	Electrofishing – 6 stations Lead nets – 6 stations Hoop nets – 6 stations			
2014	Electrofishing – 6 stations Lead nets – 6 stations			
2015	Electrofishing – 6 stations Lead nets – 6 stations			
2016	Electrofishing – 6 stations Lead nets – 6 stations Hoop nets – 6 stations			

#### **Stocking History**

Raccourci Old River has been stocked with 104,902 Florida strain largemouth bass since 2007 and 71,781 hybrid striped bass in 2009 (Table 2).

Table 2. Stocking history of Raccourci Old River, LA from 2007 – 2009.

YEAR	FLORIDA LARGEMOUTH BASS (fingerlings)	FLORIDA LARGEMOUTH BASS (phase II)	HYBRID STRIPED BASS
2007	32,156	-	-
2008	41,446	-	-
2009	30,582	718	71,781

#### Species profile

Table 3. Freshwater species of fish collected or known to inhabit Raccourci Old River.

#### Paddlefish Family, POLYODONTIDAE

Paddlefish, Polyodon spathula (Walbaum)

#### Gar Family, LEPISOSTEIDAE

Spotted gar, Lepisosteus oculatus (Winchell)

Longnose gar, *Lepisosteus osseus* (Linnaeus)

Shortnose gar, *Lepisosteus platostomus* (Rafinesque)

Alligator gar, Lepisosteus spatula (Lacépède)

#### Bowfin Family, AMIIDAE

Bowfin, Amia calva (Linnaeus)

#### Freshwater Eel Family, ANGUILLIDAE

American eel, *Anguilla rostrata* (Lesueur)

#### Herring Family, CLUPEIDAE

Skipjack herring, *Alosa chrysochloris* (Rafinesque)

Gizzard shad, Dorosoma cepedianum (Lesueur)

Threadfin shad, *Dorosoma petenense* (Günther)

#### Minnow Family, CYPRINIDAE

Common carp, Cyprinus carpio (Linnaeus)

Golden shiner, *Notemigonus crysoleucas* (Mitchill)

Emerald shiner, Notropis atherinoides (Rafinesque)

Taillight shiner, *Notropis maculatus* (Hay)

Blacktail shiner, Cyprinella venusta (Girard)

Bighead carp, Hypophthalmichthys nobilis (Richardson)

Silver carp, *Hypophthalmichthys molitrix* (Valenciennes)

Grass carp, Ctenopharyngodon idella (Cuvier and Valenciennes)

#### Sucker Family, CATOSTOMIDAE

Lake chubsucker, Erimyzon sucetta (Lacépède)

Smallmouth buffalo, *Ictiobus bubalus* (Rafinesque)

Bigmouth buffalo, *Ictiobus cyprinellus* (Valenciennes)

Black buffalo, Ictiobus niger (Rafinesque)

#### Freshwater Catfish Family, ICTALURIDAE

Black bullhead, Ameiurus melas (Rafinesque)

Yellow bullhead, *Ameiurus natalis* (Lesueur)

Blue catfish, *Ictalurus furcatus* (Lesueur)

Channel catfish, *Ictalurus punctatus* (Rafinesque)

Madtom, Noturus spp.

Flathead catfish, Pylodictis olivaris (Rafinesque)

#### Pirate Perch Family, APHREDODERIDAE

Pirate perch, Aphredoderus sayanus (Gilliams)

#### Livebearer Family, POECILIIDAE

Western mosquitofish, Gambusia affinis (Baird and Girard)

Sailfin molly, *Poecilia latipinna* (Lesueur)

#### Silverside Family, ATHERINIDAE

Mississippi silverside, Menidia audens

Inland silverside, Menidia beryllina (Cope)

#### Temperate Bass Family, PERCICHTHYIDAE

White bass, *Morone chrysops* (Rafinesque)

Yellow bass, *Morone mississippiensis* (Jordan and Eigenmann)

Striped bass, *Morone saxatilis* (Walbaum)

Palmetto bass, Morone saxatilis & X Morone chrysops

#### Sunfish Family, CENTRARCHIDAE

Flier, Centrarchus macropterus (Lacépède)

Green sunfish, *Lepomis cyanellus* (Rafinesque)

Warmouth, Lepomis gulosus (Cuvier)

Orangespotted sunfish, Lepomis humilis (Girard)

Bluegill, *Lepomis macrochirus* (Rafinesque)

Longear sunfish, *Lepomis megalotis* (Rafinesque)

Redear sunfish, *Lepomis microlophus* (Günther)

Spotted sunfish, *Lepomis punctatus* (Valenciennes)

Florida largemouth bass, Micropterus floridanus

Hybrid largemouth bass, M. floridanus X M. salmoides

Bantam sunfish, *Lepomis symmetricus* (Forbes)

Spotted bass, *Micropterus punctulatus* (Rafinesque)

Northern largemouth bass, Micropterus salmoides (Lacépède)

Florida largemouth bass, *Micropterus floridanus* Kassler et al. White crappie, *Pomoxis annularis* (Rafinesque) Black crappie, *Pomoxis nigromaculatus* (Lesueur)

#### Drum Family, SCIAENIDAE

Freshwater drum, Aplodinotus grunniens (Rafinesque)

#### Pipefish and Seahorse Family, SYNGNATHIDAE

Gulf pipefish, Syngnathus scovelli (Evermann and Kendall)

#### Topminnow and Killifish Family, FUNDULIDAE

Golden topminnow, *Fundulus chrysotus* (Günther) Blackstripe topminnow, *Fundulus notatus* (Rafinesque) Least killifish, *Heterandria formosa* (Girard)

#### Mullet Family, MUGILIDAE

Striped mullet, Mugil cephalus (Linnaeus)

Nomenclature and phylogenetic order follows Nelson, *et al.* 2004. Common and Scientific Names of Fishes from the United States, Canada, and Mexico, 6<sup>th</sup> Edition. American Fisheries Society Special Publication 29. 386 pp. Exceptions are noted.

#### Genetics

Largemouth bass have not been tested for the Florida allele since stocking efforts began in Raccourci Old River. In 1992, 42 bass were tested as pure northern strain. Since it is an open system, the lake is not a candidate for the continued stocking of Florida bass.

#### Threatened/endangered/exotic species

Pallid sturgeon inhabits the reach of the Mississippi River where it connects to Raccourci Old River. Paddlefish are inhabitants of the Lake. Common carp, Asian carp and grass carp are also present.

#### ANGLER SURVEYS

#### **Historic information**

A survey was conducted by the Louisiana Wildlife and Fisheries Commission in July and August of 1962. Creel census results showed 6,291 fishermen spent a total of 33,370 hours fishing the lake. Total catch was 2,657 largemouth bass, 16,818 crappie and 39,345 bluegill sunfish.

#### Current methods

NONE

#### HYDROLOGICAL CHANGES

- Separated from the Mississippi River in 1848 to better navigation.
- Construction of Mississippi River levee confined Old River and Raccourci Island to the river side of the levee.
- Construction of the rock weir in the Narrows stops water from flowing out of the lake to the river when the river stage at Baton Rouge is 15'MSL or less.
- Operation of the Morganza Spillway draws large volumes of Mississippi River water through Raccourci Island and Old River.
- Construction of the Potato Levee further confines lake water on the Mississippi River side of the main guide levees.

#### WATER USE

**Hunting** 

Yes

Skiing

Yes

Scuba Diving

No

**Swimming** 

Yes

**Irrigation** 

No

Fishing

Yes

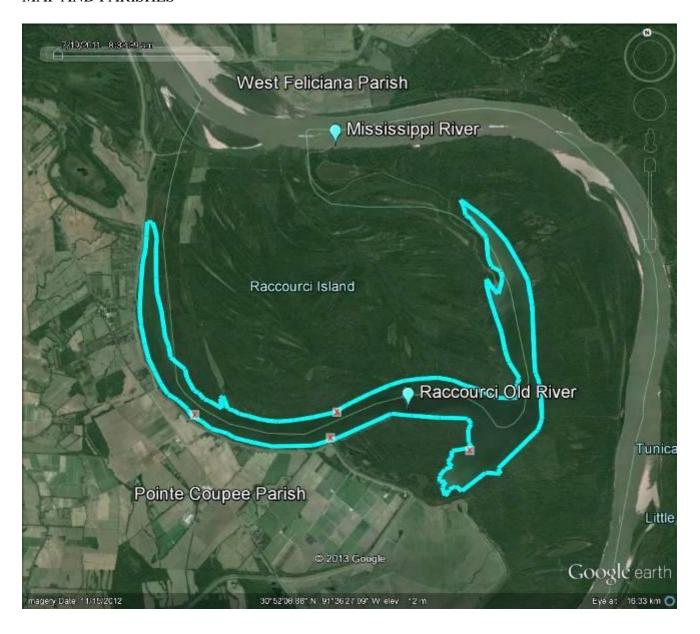
**Boating** 

Yes

#### APPENDIX I

(return to parishes)

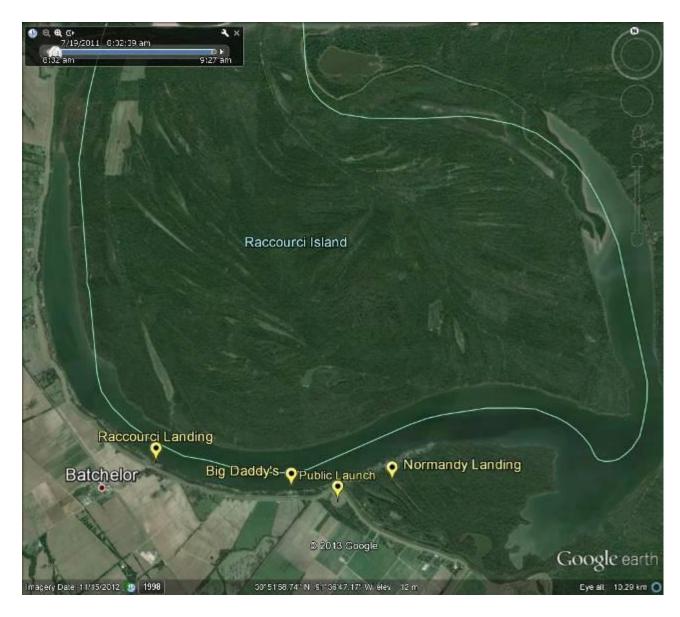
#### MAP AND PARISHES



#### APPENDIX II

(return to boat docks)

#### MAP AND LANDINGS



#### APPENDIX III

(return to events)

#### SPILLWAY MAP



\*Natural-color satellite image of the Floodway on May 15, 2011

#### APPENDIX IV

(return to events)

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#### LETTER OF OPPOSITION

#### THE MANAGEMENT VIEWPOINT

SUMMARY OF REPORT
COMMENTS ON PROPOSED DAM ON OLD RIVER
BATCHELOR, LOUISIANA\*

A request was made by the Pointe Coupee Parish Police Jury to the Department of Public Works for a survey and study for a dam on the channel connecting Old River, a large backwater lake, with the Mississippi River. Consequently, the Department of Public Works designed a structure to raise the flood stage of Old River to 26.0 feet above mean sea level (MSL). The purpose of this report is to comment on the effects of the dam on the Old River sport fishery.

The present control stage of the outlet of Old River is 17 feet MSL. Therefore, the dam will raise the water level in the lake 9 feet. The lake presently has an area of 3,250 acres at pool stage. At 26 feet MSL the lake will have an area of 4,900 acres. Thus the area of the lake will be increased by 1,630 acres, and this additional area will have an average depth of 4.5 feet.

I recommend that the proposed dam not be constructed. I am of the opinion that the dam would be detrimental to the sport fishery to some degree. This is not to imply that it would completely ruin or eliminate the sport fishery. Even with the dam, Old River would support a good sport fishery; however, not as good as without the dam.

Studies have shown that there is a strong correlation between fish production and mean depth of the lake, other factors being equal. The productivity of a lake increases as the mean depth of the lake decreases.

An increase in the average depth of Old River would be expected to lower its productivity. At the moment, consider that area of the lake which is already permanently flooded, i.e., the 3,250 acres below 17 feet MSL. It is estimated that the dam would increase the average depth by 50 per cent. This should lower the productivity of the lake.

The reason for this is that the energy budget in a lake is in many instances the factor limiting production. Productivity is a function of incident radiation, depth of mixing, respiration, and transparency. On lakes which are not stratified, the depth of the water would determine the depth of mixing. As the depth of water increases, basic productivity decreases.

\*Lambou, Victor W. 1962, Comments on Proposed Dam on Old River, Batchelor, Louisiana. La. Wild Life and Fisheries Commission, 37pp., mimeo.

In waters which stratify during the summer, the depth of the thermocline determines the depth of mixing. I assume that Old River stratifies. A top water withdrawal from a lake during the summer has been shown to shoal the thermocline, and thus increase productivity. By raising the water level, the length of time during the summer that water is flowing out from the top of the lake will be shortened considerably. This should increase the depth of the thermocline and consequently reduce productivity.

Now to consider that portion of the lake which is not now permanently looded, but would be if the dam was built. These 1,630 acres would be more productive to fish life if it is not permanently flooded.

The apparent decline in productivity of stable impoundments can be correlated with the availability of plant nutrients in the bottom soil. During the initial period of high productivity, the fixed nitrogen, phosphates, and ionizable salt contents of the water are satisfactorily high. This is produced by the solution of material leached from the organic debris, chiefly trees, brush, and grass left on the floor of the basin before flooding. From the fixed nitrogen of the plant material leaching into the water, a nitrogen food chain for higher animals is started with bacteria and protozoa as basic links. However, after a time, when the fixed nitrogen of the plant material has been exhausted, production declines. Following this period, the fertility of the lake is dependent upon what nutrients are washed in from the watershed or can be obtained from the bottom soils.

Old River would not lose fertility like some lakes, because the turbid waters entering from the Mississippi River each year are rich in nutrients and would have a fertilizing effect. However, the food chain would be different in this area if it was permanently flooded. I do not believe the resulting chain is as efficient as the type of food chain which would occur if the area would not be permanently flooded.

When the water is removed, the soil nutrients in the bottom are broken down into forms which are readily utilized. Also, the productivity of lakes can be increased by the invasion of plant life into the zone of fluctuation. It is an accepted fact that the above process of increasing soil fertility occurs on well aerated soils and not on wet or submerged soil. Much of this is available when the area is again flooded; however, more important, much of it is utilized by higher plants to support a rank growth of terrestial vegetation. This tremendous amount of organic material is a form of stored energy which can be utilized when the land is again flooded. The breakdown of the organic matter produces a tremendous amount of food for fishes during the time of the year when they are making their most rapid growth. This timing of the release of the food supply for the larger fishes is as important as the quality of food produced. In the case of crayfish, practically all of the animals can be utilized for food by different sizes of fishes. Crayfish can produce a tremendous poundage of animal life, probably in excess of several thousand pounds per acre, over a period of several months.

Crayfish are important in the diet of the large predaceous fishes in backwater lakes. During 1959, when largemouth bass had to turn to other foods because of the failure of the crayfish crop, the bass fed less often on forage of smaller size, with the result that the population was in poorer condition. The production of crayfish in any quantity is correlated very closely with water fluctuation. It is necessary for the water to get off the land for their production in any quantity. The reduction of the time and area overflowed would have an adverse effect on the crayfish production. The area above 26 feet MSL would still produce crayfish; however, the raising of the lake would cut down on the length of time the crop would be produced and also the length of time the predators could utilize this source of food.

There is a good possibility that much of this additional area flooded would not be utilized for fishing purposes extensively. Some of it is thickly wooded with the exception of the area known as Mondu Lake. Until the timber died and decomposed, much of it would be extremely thick and hard to get into and around. Also there is a good possibility that aquatic weeds would become abundant, making it hard for fishermen and predaceous fish to utilize it during low water stages.

I have noticed that the backwater lakes which have the greatest fluctuation of water levels on an area basis and also which have the greatest period of fluctuation as measured in time have the best sport fishing. It is the extremes in fluctuation on an area and time basis which have the most desirable effects on the sport fisheries and unless the fluctuation is extreme, it will have little effect on the fish population.

Over the past 20 years (1942-1961), the extent of the overflow on Old River as measured in days would have been reduced by 33.4 per cent, ranging from 14 to 75 per cent reduction for individual years. It is estimated that if the whole surrounding area was overflowed, there would be approximately 38,000 acres flooded. However, very seldom, if ever, would the water get this high. During many years the water will not get above 40 feet MSL in the lake for any extended period of time. If the whole area was flooded, the lake would have a ratio of maximum to minimum pool area of 11.7 and with the dam it would be 7.7. If 40 feet MSL is considered the maximum pool area, the ratio is 6.2 without the dam and 4.0 with it. Thus it appears that there would be a noticable reduction in the maximum to minimum pool area.

The quality and quantity of sport fishery afforded by a lake is dependent as much upon the type of fish population it supports as upon its productivity. Fish populations can be divided into four types: (1) CROWDED POPULATIONS, (2) BALANCED FOPULATIONS, (3) EXPANDING POPULATIONS, and (4) FLUCTUATING POPULATIONS. CROWDED POPULATIONS, which are one of the principal causes of poor fishing, usually occur as a result of inadequate predation. Such populations occur usually in bodies of water in which changes in environmental conditions are minimized. BALANCED POPULATIONS usually affect good fishing and are characteristic of managed farm ponds. It is dependent on the establishment and maintenance of a delicate balance between predator and prey. EXPANDING POPULATIONS almost invariably provide good fishing. It is characteristic of new lakes and new large impoundments. FLUCTUATING POPULATIONS also invariably provide good fishing and are similar to expanding populations. The expanding phase in new impoundments occurs throughout the growing season and over a span of several years. The phase in which the population is rapidly expanding in the backwater lakes occurs only during part of the growing season, but it usually occurs to a greater or lesser extent each year. FLUCTUATING POPULATIONS are typical of lakes with extensive fluctuations of water levels.

It is the FLUCTUATING type of population we want to encourage on Old River. Any reduction of the duration and extent of the overflow would tend to stabilize the fish population to some degree.

One of the factors in fluctuating water levels is its effects on reproduction, especially bass reproduction. In many Louisiana lakes most of the largemouth bass don't spawn. They develop eggs; however, these are not spawned and are eventually reabsorbed. This is due to the effects of the "Repressive Factor." Certain fishes excrete or secrete a hormone-like substance in the water which acts as a repressive factor inhibiting reproduction. During overflow periods this repressive factor is diluted out, and during the big overflows, if they occur at the right time of the year, we get tremendous hatches of largemouth bass, crappie, white bass, and the types of sport fishes we wish to encourage. By building the dam, and thus reducing the extent and duration of the overflow, the repressive factor would not be diluted out as much as formerly and this could have adverse effects on the reproduction of largemouth bass and other species.

Overflow limits the competition for food, space, and spawning territory. Young fish have an extremely abundant source of food, and thus their mortality rates are reduced and growth rates increased. Food in the form of fish and crayfish are plentiful for the large predators, allowing them to make rapid growth.

In the backwater lakes two factors control the establishment of strong year classes of largemouth bass. These are: (1) extensive overflow at the right time of the year and (2) the overflow must last long enough during the spring and summer to allow the young bass to get a good start in growth. The proposed dam on Old River would have an adverse effect on these two factors controlling the strength of year classes of largemouth bass.

Largemouth bass (also white bass where they occur) are one of the most important predators on small fishes. Predation by them is necessary to keep forage fishes from becoming overabundant. This is especially true in the case of surfishes. If large numbers of small sunfishes are not eaten by the large predators, they would soon become overabundant and stunted and furnish very little bream fishing of poor quality.

During late summer and fall, largemouth bass are able to more efficiently feed on forage fishes (this is the time of year when most of the spring crop of crayfish would be gone) if the water levels are low, crowding the forage fishes somewhat and bringing them out of cover (brush and aquatic weeds). The dam on Old River would keep the water higher, and the forage fish would have more cover and be less available to predators which would have an adverse effect.

It should be helpful to consider how fishing pressure, yield, catch per unit of effort, and population levels are all related. With a relatively high fishing pressure, an increase in fishing pressure has practically no effect in the catch per unit of effort; however, the catch per unit of effort is low. Below this point the rate of catch increases slowly with dimishing fishing pressure. With a further decrease in fishing pressure the

rate increases more rapidly and then very rapidly. Presumably at some level of fishing pressure the population would become overfished, and the size of the population would decrease and yield would become less. However, normally this does not happen in sport fisheries because as catch per unit of effort decreases some fishermen will quit fishing that body of water and fishing will be stabilized at a point below the previous level.

It is contended by some that fishing has declined on Old River. Presumably, most sport fishermen on Old River would measure the quality of sport fishing by the catch per unit of effort. However, fishing pressure on Old River has increased tremendously over a period of say 5 to 10 years. In all probability, total yield of sport fish for Old River has increased, but the catch is divided among more fishermen.

Some of the proponents of the dam maintain that when the water is falling and the backwater reaches a certain level, bass fishing becomes extremely good, and therefore if the water level is maintained at this level, fishing will remain good. I have seen this type of management tried before, and without exception it did not work out.

My experience is that the bonanza in bass fishing is usually while the waters are receding rapidly and not when the water level is stabilized. It should be pointed out that at the stage when fishing is now so good, the water is receding, usually rapidly. However, with the dam, it will be stabilized at that level. This period of exceptionally good fishing is probably explained by the following facts. Previously, the poundage of bass has increased while the water is high, and during this time most of the fish were not vulnerable to fishermen. When the water recedes there is a harvestable supply of bass; however, as soon as they are reduced in number, the catch per unit of effort will decrease. Also, they are not educated to the deadly effect of the fishermen's lure.

It is a common belief among sport fishermen who fish backwater lakes that most of the good fishing in these lakes is due to the fact that they are restocked in large numbers each year by fish from the rivers during high water stages. However, in the case of largemouth bass, crappie, and sunfishes (with the possible exception of white bass), I don't believe that the so-called "restocking" from the river has much effect on the resident fish population. I have noticed during a drought year if a shallow backwater lake dries up resulting in the killing of the resident population, it usually takes 2 or 3 years for the bass fishing to return.

In summary, if the objective is to improve sport fishing, I recommend that the dam not be constructed.

Victor W. Lambou Louisiana Wild Life and Fisheries Commission Baton Rouge, Louisiana